**IT Applications Unit 3, AOS 1, Online Communities**

Complete the following, from Chapter 2, Problem-solving Methodology, pgs, 60-80

**Designing a website solution, p 66**

**Problem-solving Methodology: 4 Stages**

**Analyse**

**Design**

**Development**

**Evaluate**

**Case Study:**

**Indigenous Language Trust, (ILT)**

Using the case study, ILT complete the following:

**Designing a website solution, p 66**

1. List the techniques that web developers can use to ensure their website is efficient?

* Reduce the time spent waiting for a page to load
* Ensure that all images are in a smaller format or use thumbnails so that the page will load up with minimal effort.

1. List the techniques that web developers can use to ensure their website is effective?

* Check to see that the appearance of the website is not affected when different web browsers are used.
* Make it easier for the user to navigate through the website by allowing the colour of a visited link to change when a visitor has clicked on it.
* Keep the layout consistent throughout the website, and consistent design and look makes it easier for visitors to locate information.
* Clear, consistent layouts help people with visual impairments or learning disabilities who have difficulty using a disorganised navigation scheme.
* Information needs to be clearly displayed on the website

**Identifying how a solution will function**

Taking into account the technical constraints a range of design tools can be used to show the functionality of the website. Elaborate on each of the following functional design tools:

1. IPO Charts: to show how data is processed into information
2. Flowcharts: to show how to gain access to data and information
3. Layout diagrams: to show how a page on the website might function
4. Website map: to show navigation throughout the site and identify if pages are closed or open
   1. What does information architecture refer to?

Information architecture refers to the interrelationship between the information and how people put it on the web.

**Navigation Design**

1. What considerations need to be taken into planning the navigation design?

More websites generally have their navigation bars at the top or on left-hand side of the webpage.

Navigation design can be a linear listing on the webpage, a drop-down menu or a “tickler” that runs across the top of the page as you navigate the webpage.

1. What’s meant by making your website accessible?

It means that given there are many different Internet browsers, and different versions of plug-ins that can be used, it is advisable to avoid using special effects created in software such as Flash, Java, or JavaScript as the only navigation method.

1. What is a style guide?

A style guide will tell you exactly how to format communication for that organisation. Often style guides will show you how to use a company logo so that all correspondence looks as if it comes from that organisation even though many different people have produced it. When designing a website, we need to be mindful of style guidelines.

1. List the conventions of file naming.

* Filenames should be kept short and meaningful. They are easier to read in lower case than upper case.
* Every webpage must be saved with unique filename.
* Filenames are usually limited to 16 characters and contain only letters, numbers or the underscore symbol.
* Filenames of images need to be meaningful.

**Identifying how a solution will appear using design tools, p 70**

**Elaborate on the following:**

1. Mock-up diagram

A mock – up diagram is a sketch of the actual website that the designer is going to develop. A mock – up diagram can be drawn by hand or in a drawing package such as Illustrator, with headings in place, and spaces left for the text that needs to be inserted.

1. Layout diagrams

A layout diagrams is a distinctive style is required to give the website a strong identity. Layout diagrams provide a visual representation of how the final product should look.

1. Storyboard designs

A webpage storyboard is a tool used to design the features of each individual page. Storyboard show general screen designs and the placement of graphics, and describe actions and links to other pages.

**Formats and conventions,** p 73

Elaborate on the following formats and conventions

* Screen size

Selecting the correct screen size is necessary. Even though the screen on which the website is designed may be quite large, it is important to remember that some users have smaller screens.

* Index or home page

The index or home page of a website should contain important information to users.

* Scrolling

Place most of the text and image of webpages within the dimensions of a single screen, so that users don’t have to scroll down the page.

* Text

Alignment of text can be left, right, centre of fully aligned. Choose one alignment for each page, and stick to it for the entire page.

* Navigation

Once the function of a website has been planned thoroughly, the navigation paths must be determined. The following structures need to be considered when designing navigation paths.

* Font selection

Most webpages maintain the same font throughout the entire site. Sometimes different fonts are used in banners or headings. However, consistent use of fonts and sizes is recommended.

* Images and file size

A graphic, or graphic image, such as a drawing, chart or photograph, is a digital representation of information.

* Style guides

As mentioned earlier in this chapter style and conventions are also documented in a style guides provide instructions to website developers about where to use different type sizes and fonts, and whether these should be in bold or italic. They can also contain information on colours and patterns to be used as backgrounds on webpages. Formats and conventions are also documented in a style guide.

1. With the ILT case study what formats and conventions have been chosen?

The designer will be using a 19-inch screen, they need to be mindful that not all users would have the same screen size.